RECORD OF DECISION
for the
FINAL NOAA RESTORATION CENTER PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT, JUNE 2015

Introduction

The National Oceanic and Atmospheric Administration (NOAA) prepared a Programmatic Environmental Impact Statement (PEIS) entitled Final NOAA Restoration Center Programmatic Environmental Impact Statement, to evaluate coastal habitat restoration activities, which are funded or otherwise implemented through its existing programmatic framework and related procedures. Multiple NOAA programs carry out habitat restoration projects throughout the coastal United States, which includes the Great Lakes and territories. Many of these programs are housed within the National Marine Fisheries Service (NMFS) Office of Habitat Conservation's Restoration Center (NOAA RC). Habitat restoration projects implemented by NOAA vary in terms of their size, complexity, geographic location, and NOAA involvement, and they often benefit a wide range of habitat types and affect a number of different species. Fish passage, hydrologic/tidal reconnection, shellfish restoration, coral recovery, salt marsh and barrier island restoration, erosion prevention, debris removal, and invasive species removal are among the most typical project types implemented by NOAA through its various programs.

The PEIS analyzed a suite of restoration approaches that NOAA believes will most effectively conserve and restore the coastal and marine resources under NOAA trusteeship. It updates the analyses that NOAA RC prepared in its previous Programmatic Environmental Assessment (PEA) and Supplemental Programmatic Environmental Assessment (SPEA) published in 2002 and 2006, respectively. This PEIS promotes an efficient NEPA compliance process for future NOAA-supported restoration activities, through various programs, by removing the need to consult what are now multiple, out-of-date documents. The analyses in the PEA and SPEA, where relevant, along with NOAA's analyses of individual project impacts, have informed the updated analyses in this PEIS.

The PEIS takes a broad look at issues and programmatic-level alternatives (compared to a document for a specific project or action) for future restoration activities to be carried out by NOAA. In addition to providing a programmatic analysis, NOAA intends to use this document to approve future site-specific actions, including grant actions, so long as the activity being proposed is within the range of alternatives and scope of potential environmental consequences, and does not have significant adverse impacts. Any future site-specific restoration activities proposed by NOAA that are not within the scope of alternatives or environmental consequences considered in this PEIS will require additional analysis under NEPA.

Decision to Be Made

This Record of Decision documents the decision by NOAA to select and implement the "Current Management" alternative as its preferred alternative. The alternative represents a comprehensive

programmatic restoration approach that includes funding or conducting activities such as providing technical assistance; on-the-ground riverine and coastal habitat restoration activities (including but not limited to: fish passage projects; channel, bank, and floodplain restoration; buffer area and watershed revegetation; salt marsh restoration; oyster restoration; marine debris removal; submerged aquatic vegetation planting; invasive species removal; and coral restoration); and habitat conservation transactions. Because this is a continuation of NOAA RC's on-going restoration programs with no change in management direction, it is also considered to be the "No Action" alternative.

Alternatives Considered

In order to justify analysis, NOAA RC determined an alternative must be reasonable and must meet the purpose and need described in the PEIS (to evaluate and implement habitat restoration and conservation projects that recover threatened and endangered species; rebuild and maintain managed fisheries stocks; restore natural resources injured by releases of oil and hazardous substances; and ensure that valuable natural resources are available to future generations of Americans). NOAA RC used three established criteria to determine whether an alternative was realistic or reasonable, and should therefore be analyzed in detail in the PEIS:

1. "Decision-making Authority." Can NOAA leadership and program managers exercise decision-making authority on how funds and resources will be allocated? NOAA's leadership and program managers must operate within their statutory authority. If an alternative represented a situation where NOAA has no decision authority, then it was excluded from further analysis.

2. "Maximize the Public Benefit." Does the alternative ensure that the proposed action maximizes public benefit? As a federal agency NOAA must allocate funding and other resources to ensure the maximum benefit to NOAA trust resources from the proposed action. If an alternative represented a situation that excludes geographic regions which NOAA has regulatory or other stewardship duties, or that targets benefit to specific individual resources at the exclusion or detriment to other NOAA trust resources, it was excluded from further analysis.

3. "Funding-Neutral." Can the proposed action be implemented irrespective of the amount of funding the given program has at its disposal? If an alternative was based on the level of effort that would occur at a specific level of funding, it was excluded from further analysis. Future funding levels within federal programs are unknown, as they are determined each year through legislative appropriations, DARRP settlements, and external program contributions. Although NOAA could have selected an unlimited number of funding-based alternatives, none of these would have had a higher likelihood of occurrence, making the analysis time-consuming and of little value for understanding potential impacts. The PEIS shows the variable funding history in Figure 7.

An alternative must meet all of the above criteria in order to be considered reasonable. If an alternative was considered but deemed to be 1) not realistic or reasonable, or 2) not in line with the purpose and need, it was not evaluated in further detail in the PEIS. Based on this, three of the five alternatives that were described and considered in the PEIS were considered but rejected, and two were analyzed in detail. The full suite of alternatives considered follows.

Alternative 1 - "Current Management" (No Action)

NOAA (specifically the NOAA RC) has historically supported a number of different types of restoration programs to carry out NOAA's mission. The NEPA regulations require that the alternatives presented in an EIS must include a "No Action" alternative, and for programmatic analyses of ongoing programs where program activities are being analyzed as opposed to a single specific project action, the No Action alternative can be interpreted as "no change from current management." For this FPEIS, NOAA adopted the CEQ interpretation of "no action" as the preferred alternative. The activities included under this alternative were analyzed and found to be the RC's preferred alternative. These are 1) providing technical assistance, 2) conducting river and coastal habitat restoration, and 3) conducting conservation transactions.

Technical assistance may be provided before, during or after project implementation. Pre-implementation activities include project planning, feasibility studies, engineering and design reports, fish and wildlife monitoring, and permitting activities. These actions characterize the environment, determine the best restoration approach from an engineering standpoint, and predict and compare results and conditions with the project and without it. Such activities are a mixture of research into historic conditions, modeling of hydrologic response to the project, and creating maps and scale drawings of the project site. Feasibility studies typically analyze a project's environmental impacts under multiple alternatives, while the development of engineered designs typically addresses only the chosen project alternative. All of the information described above may also be required to complete permit applications.

Monitoring activities evaluate implementation quality and the effectiveness of completed or in-progress habitat restoration projects, sometimes involving volunteers as citizen scientists. This monitoring is consistent with recommendations under the Estuaries and Clean Waters Act of 2000 (Estuary Restoration Act; ERA).[1] The NOAA RC established a tiered approach to monitoring that distinguishes between implementation and effectiveness monitoring. Implementation monitoring is defined by the NOAA RC as systematic data collection to assess whether a directed restoration action was carried out as designed and, as appropriate, to determine whether the restoration action is providing a basic level of effectiveness. Effectiveness monitoring is defined by the NOAA RC as systematic data collection to assess the effectiveness of restoration actions and to assess progress toward the desired goals and outcomes of a given project.

Monitoring of fish or wildlife separate from a restoration project is also included under this alternative. The monitoring programs typically involve collecting information on fish and wildlife population abundance and diversity using a variety of methods including, but not limited to, transect surveys, traps (or other capture activities), calls, tagging, telemetry, or electrofishing. Such data can be used to develop baseline measurements of the species composition, diversity,

[1] One of the purposes of the ERA is to "to promote the restoration of estuary habitat by implementing a coordinated Federal approach to estuary habitat restoration activities, including the use of common monitoring standards and a common system for tracking restoration acreage."

and richness of a targeted habitat, which can then be used to identify changes in the ecosystem and track the progress of a restoration project.

The preferred alternative also includes projects to enhance and further public knowledge about the local environmental resources, the ecological importance of restoration activities, and the value of the environment to local communities. Project types may include various youth group activities that promote environmental stewardship and educate youth about living coastal and marine resources and the coastal environment, training programs, formal school partnerships, monitoring programs, and development of educational materials.

Riverine and coastal habitat restoration activities are described in 11 sections of the document, and include all the most-commonly implemented restoration techniques in the coastal environment. NOAA has many years of experience with each of these activities. Full descriptions of the activities are included in Section 2 of the PEIS.

- beach and dune restoration (see PEIS section 2.2.2.1)
- debris removal (see PEIS section 2.2.2.2)
- fish passage (see PEIS section 2.2.2.3)
    - dam and culvert removal, modification, or replacement
    - technical and nature-like fishways
- fish, wildlife and vegetation management (see PEIS section 2.2.2.4)
    - invasive species control
    - prescribed burns and forest management
    - species enhancement
- freshwater stream restoration (PEIS section 2.2.2.5)
    - channel restoration
    - bank restoration and erosion reduction
- reefs (. see section 2.2.2.6);
    - coral reef restoration
    - shellfish reef restoration
    - artificial reefs
- road upgrading and decommissioning; trail restoration (see PEIS section 2.2.2.7;
- signage and access management (see PEIS section 2.2.2.8)
- subtidal planting (see PEIS section 2.2.2.9)
    - submerged aquatic vegetation
    - marine algae
- water conservation and stream diversion (see PEIS section 2.2.2.10)
- wetland restoration (see PEIS section 2.2.2.11)
    - levee and culvert removal, modification and set-back
    - fringe marsh and shoreline stabilization
    - sediment removal
    - sediment/material placement
    - wetland planting

Conservation transactions include land acquisitions, water transactions, and restoration and conservation credit transactions. Conservation transactions can be used strategically to conserve,

protect, and restore our nation's fisheries resources. These transactions can take many forms, including land acquisition (fee-simple purchase, permanent easements, and temporary easements), water transactions (water rights acquisition or transfers, water easements, and temporary forbearance agreements), and purchasing restoration or conservation credits from a restoration or conservation bank.

Alternative 2 – "Technical Assistance"

This alternative represents a scenario of providing minimal to no on-the-ground restoration, and would emphasize a heavy focus on the RC providing an advisory capacity. The technical assistance provided in this alternative would essentially be the same as technical assistance activities described in Alternative 1 (Current Management). However, these activities would not include any physical restoration activities the preferred alternative would implement.

Technical assistance activities are important to the overall restoration process; however they do not normally achieve immediate tangible habitat restoration benefits as they exclude the on-the-ground activities. Therefore, under this alternative, the benefits resulting from on-the-ground restoration activities would not be a result of direct involvement by NOAA, and efforts toward achieving NOAA's mission as outlined in the Purpose and Need would be greatly reduced.

Alternative 3 – "Disbanded/Expanded Program"

This potential alternative represents a theoretical scenario defined by increased or decreased (i.e., zero) levels of funding. It was rejected because it did not meet any of the three criteria. NOAA leadership and management do not have the decision-making authority to abnegate responsibilities under a number of authorities. The Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006 authorizes the NOAA RC's Community-based Restoration Program to implement and support the restoration of fishery and coastal habitats by providing federal financial and technical assistance for local restoration and to promote stewardship and conservation values for NOAA trust resources. If NOAA received federally appropriated funds to implement habitat restoration, but did not do so because of disbanded restoration programs, the agency would be disregarding congressional intent. Secondly, the Comprehensive Environmental Response, Compensation, and Liability Act and the Oil Pollution Act authorize the President to act on behalf of the public as trustee for natural resources regarding the release or threatened release of hazardous substances in the environment or for the discharge or threatened discharge of oil into navigable waters or adjoining shorelines, respectively. In both cases, NOAA has been delegated trustee authority with respect to natural resources for which the agency has management or protective responsibilities. As such, these Acts require NOAA to seek damages on behalf of the public to restore natural resources within the scope of its trusteeship that are injured by the release of hazardous materials or discharge of oil.

If NOAA was to receive appropriated or settlement funds to implement habitat restoration, but had disbanded its restoration programs and therefore did not do so, no public benefit would result. This alternative does not meet the required criteria (in particular criterion #3), as it is dependent on selecting a level of funding-- either $0, or some amount larger than the historic

range of funding. It also would not achieve the purpose and need, and therefore it was considered but rejected from detailed further analysis.

Alternative 4 - Limited Geography Focus and Alternative 5 - Limited Project Type Focus

For similar reasons, both of these alternatives were rejected from further analysis in this document. These alternatives represent scenarios where NOAA implements restoration exclusively in one or more specific, limited locations or chooses to implement a limited suite of restoration activities. Alternatives such as these, with a particular intensity in a specific geographic area or a particular restoration activity, are not reasonable because they fail to meet criterion #1.

Although NOAA managers do have the authority to limit participation in implementing restoration activities, when they receive federally appropriated funding with broad authorities, NOAA has historically received congressional appropriations with limited intent or geography. Two such examples are the Great Lakes Habitat Program/Great Lakes Restoration Initiative with a specific geographic focus, and the Open Rivers Initiative with limited restoration activity intent. For this reason, this alternative did not meet Criterion #1.

The notice of intent (NOI, to prepare the PEIS) published during the scoping process for this PEIS laid out three alternatives to be evaluated for their potential environmental impacts due to the implementation of the proposed action. Alternative 1 in the NOI called for the implementation of a comprehensive range of restoration activities (analogous to this document's Alternative 1). Alternative 2 in the NOI called for the implementation of that same range of physical restoration activities, but it excluded Land and Water Acquisition activities. Alternative 3 in the NOI called for the implementation of a smaller range of activities limited to Technical Assistance (analogous to Alternative 2 in the PEIS). Throughout the scoping process and as a result of public input on the Draft PEIS and internal discussions, the PEIS was modified to analyze only the two alternatives that met all three criteria for being realistic and reasonable alternatives Alternative 1 and Alternative 2). NOAA determined that Alternative 2 from the NOI was similar to the rejected Alternatives 4 and 5 described above. The separate analysis of Alternative 2 in the PEIS (technical assistance only activities) emerged as a reasonable way to demonstrate the loss of significant beneficial impacts when only desk activities or field studies are conducted.

Public Comment, Environmentally Preferable Alternative, and Rationale for Selection

The NOAA RC appreciated the public input it received in considering the alternatives for the proposed action. Public comments were received during the scoping period and the public comment period after the draft PEIS was published. This helped shape the direction of the analysis. During the scoping period, which began March 5, 2012, 10 comments were received. The comments ranged from information requests, to questions on the scope and breadth of the document, to comments on suggested areas of focus for the analysis. Public comment received during the scoping period supports the concept that NOAA is an important source of funding for national, regional, and local restoration partners who conduct habitat restoration. Comments

were received from non-profit organizations, government agencies (federal and state), and universities. Summarized comments are presented in Chapter 5.0 of the PEIS, with a full list of comments included in Appendix B of the PEIS.

During the draft PEIS public comment period, which began January 29, 2015, NOAA received 10 comments that addressed 33 topics. The topics ranged from suggestions for additional activities, to comments on resources missing from the analysis, to support for the preferred alternative. Comments were received from non-profit organizations, government agencies (federal and state), for-profit organizations, and individuals.

The PEIS alternatives were analyzed as described, and RC determined that Alternative 1 (Current Management, also known as the No Action alternative for the PEIS) is the environmentally preferable alternative. This alternative takes the most comprehensive approach to achieving NOAA's mission by continuing the implementation of a wide range of restoration activities. It includes a diverse range of ongoing program activities that are typically implemented through NOAA habitat restoration programs. It enables NOAA to maintain the high level of efficiency and flexibility provided by a comprehensive restoration approach. Efficiency and flexibility are especially important when considering the varying economic and budget conditions which NOAA must adapt to each year, and to which restoration project managers must adjust.

Mitigation Measures and Monitoring

All practicable means to avoid or reduce adverse impacts from implementing the preferred alternative would be adopted through best management practices or mitigation measures described in the PEIS for each activity type. In regard to monitoring, the NOAA RC has developed and adopted a Monitoring, Evaluation, Reporting, and Feedback Framework (Framework) for the restoration projects supported through its various programs. The Framework establishes a consistent and cost-effective approach to the monitoring and evaluation of habitat restoration projects so that the extent to which the projects have produced the intended benefits to habitat can be documented. To do this, the NOAA RC established a tiered approach to monitoring that distinguishes between implementation and effectiveness monitoring.

Tier I (implementation) monitoring is defined by the NOAA RC as systematic data collection to assess whether a directed restoration action was carried out as designed and, as appropriate, to determine whether the restoration action is providing a basic level of effectiveness. Examples of Tier I parameters may include as-built topography/bathymetry (e.g., width, depth, slope, height, elevation, etc.), other ecosystem structure components (e.g., survival of planted species, water stage, etc.), and/or presence/absence of target fish species.

Tier II (effectiveness) monitoring is defined by the NOAA RC as systematic data collection to assess the effectiveness of restoration actions and to assess progress toward the desired goals and outcomes of a given project. It typically addresses the development, enhancement, or testing of coastal habitat restoration techniques; improves the understanding of trophic relationships within coastal habitats; and improves habitat restoration monitoring and evaluation methods. Tier II monitoring and evaluation address ecological and/or technique effectiveness questions and thus

advances the understanding of the efficacy of habitat restoration actions. Tier II monitoring data analyses and dissemination of results inform future priorities, project selection, and implementation activities and improve RC programs and advance restoration practice.

The Framework described above also provides guidelines for data management and reporting and describes a process for using what is learned from monitoring to influence program priorities, project selection, implementation actions, and external communications. The goal for implementing this Framework is to improve the NOAA RC's planning, decision-making, information sharing, and overall effectiveness at achieving the NOAA RC's desired outcomes. The degree to which NOAA and its partners implement Tier I and Tier II monitoring depends largely on the amount of funding available to their programs.

Conclusion

Through the PEIS, and documented in this ROD, the NOAA RC has analyzed alternatives, associated impacts, and extent to which impacts could be mitigated. The NOAA RC considered public and agency comments received during the public review period, and selected "Current Management" (also known as "No Action") as its preferred alternative. NOAA RC concludes it is the most comprehensive and preferable approach to achieving NOAA's mission through continued implementation of a wide range of restoration activities.

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Date